



STORMWATER BEST MANAGEMENT PRACTICES (BMPs)

Description: DeIDOT is responsible for over 600 stormwater best management practices (BMPs) that have been accepted into our maintenance responsibility, with another 200+ currently in design or construction. The BMPs provide water quality and/or quantity measures for our roadway improvement projects. The NPDES Program oversees the BMPs once a project is accepted by DeIDOT Maintenance & Operations. Minor maintenance is provided by the Maintenance Districts and major maintenance is contracted by the NPDES Program. The NPDES Program also contracts out the annual inspections of the BMPs.

Annual Budget: Funding varies by year. Average current funding allows for the annual inspections, minor maintenance, and approximately 1.2% of the BMPs to have major maintenance performed annually. As the **Performance Projections** show in the next page, ideally funding would be increased to meet the State of Good Repair thresholds.

Asset Valuation: Using major maintenance costs as the replacement costs, the value of the current BMP inventory is approximately \$25.2M

STATE OF GOOD REPAIR

Annual Inspections are conducted for BMPs under DeIDOT's maintenance obligation and the overall condition is rated as A, B, C or D:

- A:** No maintenance, or minor observations.
- B:** Minor maintenance generally handled by Maintenance District staff
- C:** Major maintenance generally handled by a contractor
- D:** Failing BMP in need of a retrofit

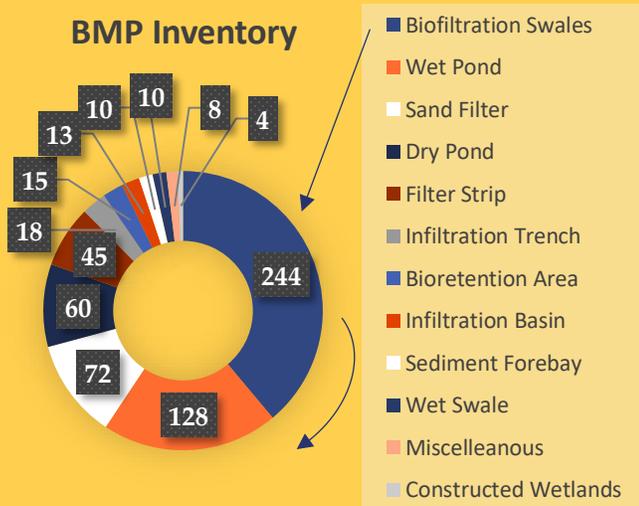
TARGETS AND MEASURES

Ideally the following thresholds of overall BMP condition scores would be maintained to keep the inventory in a state of good repair:

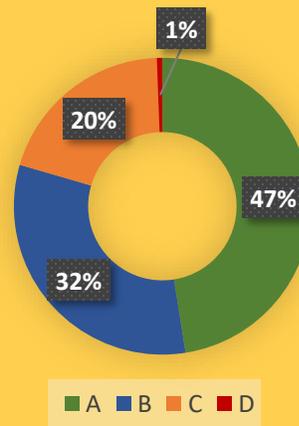
- < 1% Failing (D Rated)
- < 15% Significant Investment (C & D Rated)

INVENTORY & CONDITION

BMP Inventory



BMP Conditions



AGE DISTRIBUTION

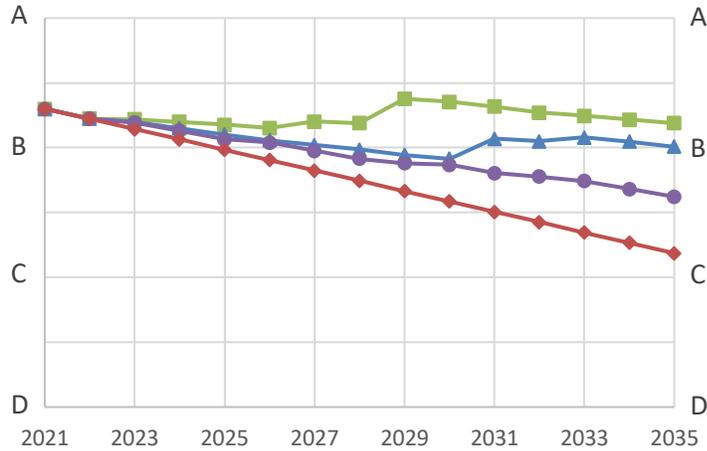




PERFORMANCE PROJECTIONS

The following charts look at four funding scenarios, two with an increase in funds, one at our average current funding, and the last with no maintenance funds. The charts track the overall BMP conditions over a 15-year period. The last full year of BMP inspection data is used as the starting point for the 15-year performance projections.

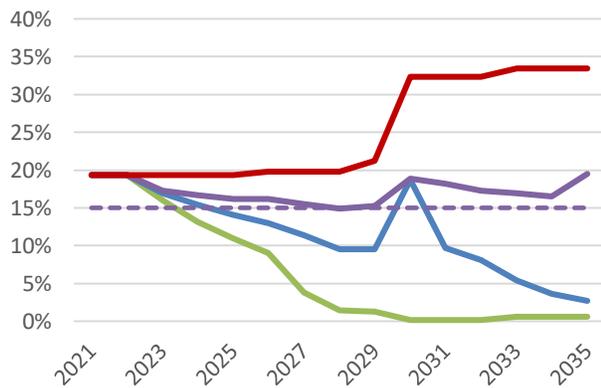
Projected Overall BMP Condition



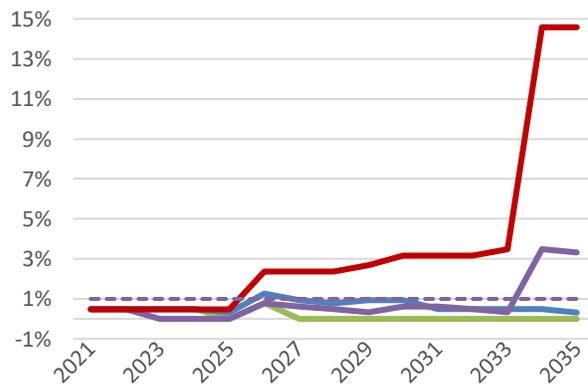
Legend

- Scenario I Funding Increase: **\$1.7M** Present Day Funding (**\$40.9M** over 15 Years), with 5% of BMPs Receiving Major Maintenance
- ▲ Scenario II Funding Increase: **\$1.1M** Present Day Funding (**\$25.9M** over 15 Years), with 2.5% of BMPs Receiving Major Maintenance
- Scenario III Current Funding: **\$766k** Present Day Funding (**\$13.2M** over 15 Years), with 1.2% of BMPs Receiving Major Maintenance
- ◆ Scenario IV Funding Decrease: **\$97k** Present Day Funding (**\$1.7M** over 15 Years), with 0% of BMPs Receiving Major Maintenance and No Minor Maintenance (Only Annual Inspections)
- - - Target: < 15% C & D Rated
< 1% D Rated

% C & D Rated BMPs



% D Rated BMPs



POTENTIAL RISKS

Risks affecting the state of maintenance on DeIDOT's stormwater BMPs include:

- Natural impacts due to flooding and intense rainfall; beavers and other nuisance wildlife; tornados and high wind damage; invasive species that clog or reduce BMP capacity.
- Human impacts due to vehicular accidents or tire rutting; excessive trash.
- Political impacts due to the public requesting more frequent or additional maintenance than required; drainage or flooding concerns to be addressed shifting maintenance priorities.
- Aging infrastructure impacts causing inlet or outlet pipes to fail; excessive sediment accumulation; soil or landscaping replacement.
- The most detrimental risk is the rising number of BMPs in our inventory without an increase in maintenance staff and budget.